

REMARKS

Claims 1, 3, 4, 6-20, 23-25 and 27-46 are pending. Claims 31-35 have been allowed. Claims 2, 5, 21, 22 and 26 have been canceled. Claims 36-46 have been added.

The Examiner rejected Claims 1-4, 6-8, 11-16, 18, 20 and 21 under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 4,306,531 to Watkins ("Watkins '531"). The Examiner rejected Claims 10 and 24-28 under 35 U.S.C. 103(a) as being obvious in view of Watkins '531. The Examiner objected to Claims 10, 19, 22, 23, 29 and 30 as being dependent upon rejected base claims, but indicated that same would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Watkins '531 discloses a fuel system, shown in the sole Figure thereof, including fuel tank 10, fuel pump 34, fuel distribution system 14, and carburetor 12 which are connected by a series of conduits. When the engine is started, solenoid valve 92 is closed and solenoid valve 78 is opened, and fuel pump 34 delivers liquid fuel from fuel tank 10 to fuel distribution system 14, and thence through conduit line Y to carburetor 12. As the liquid fuel within vaporizing chamber 26 of fuel distribution system 14 is heated, vaporized fuel is produced, resulting in the supply of a liquid fuel/fuel vapor mixture and eventually a supply of mostly fuel vapor through conduit line Y to carburetor 12. Fuel bowl 16 of carburetor 12 includes a sole liquid fuel/fuel vapor inlet, namely a conduit line Y, and liquid fuel and fuel vapors are metered into fuel bowl 16 of carburetor 12 via valve assembly 70. Valve assembly 70 includes a float 72 and needle valve 74 wherein, when the level of liquid fuel in fuel bowl 16 is low, float 72 is disposed downwardly by gravity to open needle valve 74 and, when the level of liquid fuel level within fuel 16 is high, float 72 floats on the liquid fuel to close needle valve 74. In this manner, valve assembly 70 is a gravity-operated valve responsive to the amount of liquid fuel within fuel bowl 16.

Amended independent Claim 1 calls for an internal combustion engine, including, *inter alia*, a control valve responsive to vacuum produced within the engine during running of the engine. The foregoing structure is not disclosed by Watkins '531.

By contrast, the fuel system disclosed in Watkins '531 lacks any valves which are responsive to vacuum produced within an engine. In particular, as described above, valve assembly 70 of the Watkins '531 carburetor is a gravity-operated float valve which is responsive to the level of liquid fuel within fuel bowl 16 of carburetor 12, and not to vacuum produced within the engine during running of the engine. Thus, Applicants respectfully submit that

amended independent Claim 1, as well as Claims 2-4 and 6-12 which depend therefrom, are not anticipated by, nor obvious in view of, Watkins '531.

Amended independent Claim 13 calls for a carburetor, including, *inter alia*, a fuel bowl including a fuel inlet and a vent inlet separate from the fuel inlet. The foregoing structure is not disclosed by Watkins '531.

By contrast, Watkins '531 discloses a fuel system including carburetor 12 having fuel bowl 16 which includes a sole inlet, namely conduit line Y, through which liquid fuel, fuel vapors, or a mixture of the foregoing passes into fuel bowl 16 of carburetor 12. Thus, Applicants respectfully submit that amended independent Claim 13, as well as Claims 14-19 which depend therefrom, are not anticipated by, nor obvious in view of, Watkins '531.

Amended independent Claim 20 calls for a method of operating an internal combustion engine having a fuel tank and a carburetor, including the step of opening a control valve responsive to vacuum produced within the engine substantially contemporaneously with starting the engine.

In contrast to the foregoing, Watkins '531 discloses a fuel system which lacks any control valves which are responsive to vacuum produced within an engine. As discussed above with respect to amended independent Claim 1, valve assembly 70 of carburetor 12 of Watkins '531 is not responsive to vacuum produced within an engine. Thus, Applicants respectfully submit that amended independent Claim 20, as well as Claim 23 which depends therefrom, are not anticipated by, nor obvious in view of, Watkins '531.

Amended independent Claim 24 calls for an internal combustion engine including, *inter alia*, a fuel tank including a filler neck with an inlet, and a vent passage formed at least partially within the filler neck. Referring to Fig. 5 of the present patent application, fuel tank 54 includes filler neck 56 and vent passage 112 formed at least partially within filler neck 56.

By contrast, fuel tank 10 of the Watkins '531 fuel system lacks the foregoing structure. Thus, Applicants respectfully submit that amended independent Claim 24, as well as Claims 25 and 27-30 which depend therefrom, are not anticipated by, nor obvious in view of, Watkins '531.

New independent Claims 36, 41 and 44 each call for an internal combustion engine including, *inter alia*, a valve responsive to vacuum produced within the engine during running of the engine and, for the reasons discussed above with respect to amended independent Claims 1 and 20, Applicants respectfully submit that new independent Claims 36, 41 and 44, as well as

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claims 37-40, 42, 43, 45, and 46 which depend therefrom, respectively, are patentable over Watkins '531.

It is believed that the above represents a complete response to the Official Action and reconsideration is requested. Specifically, Applicants respectfully submit that the application is in condition for allowance and respectfully request allowance thereof.

In the event Applicants have overlooked the need for an additional extension of time, payment of fee, or additional payment of fee, Applicants hereby petition therefore and authorize that any charges be made to Deposit Account No. 02-0385, Baker & Daniels.

Should the Examiner have any further questions regarding any of the foregoing, he is respectfully invited to telephone the undersigned at (260) 424-8000.

Respectfully submitted,



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CERTIFICATION OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on: May 23, 2005

ADAM F. COX, REG. NO. 46,644

Name of Registered Representative



Signature

May 23, 2005

Date